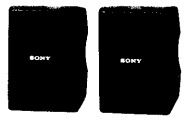
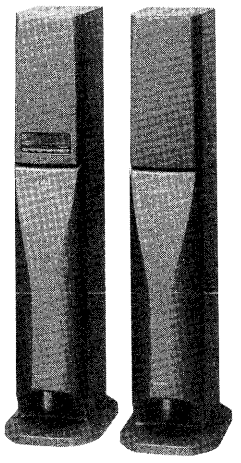
SA-VA15

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model
Chinese Model



• REAR SPEAKER



• FRONT SPEAKER SYSTEM

SPECIFICATIONS

Audio Power Specifications

For front full range/center woofer speakers: with 8 ohm loads, both channels driven, from 70 Hz – 20 kHz; rated 20 watts per channel minimum RMS power, with no more than 0.9% total harmonic distortion from 250 milliwatts to rated output.

Amplifier section

Continuous RMS power output	total 100 W
Center tweeter	20 W (8 ohms at 10 kHz,10 % THD)
Front full range/ Center woofer	20W + 20W (8 ohms at 1 kHz, 10 % THD)
Super woofer	20 W (8 ohms at 40 Hz, 10 % THD)
Rear	10 W + 10 W (8 ohms at 1 kHz, 10 % THD)
Input sensitivity/ Impedance	450 mV, 50 kilohms
Output	1/2: 450 mV, 1 kilohm Center: 350 mV, 1 kilohm Rear: Accepts only supplied rear speakers SS-SR151 R-ch: Accepts only SA-VA15 R-ch speaker with supplied exclusive speaker cord
Tone control	
Front/Center	Bass: ±10 dB at 100 Hz Treble: ±10 dB at 10 kHz

Speaker section

Type	
Front speaker	Bassreflex type
DBR super woofer	SAW type
Rear speaker	Bassreflex type
Speaker unit	
Front speaker system	Center tweeter: 5 cm cone type (x2) Front full range/Center woofer: 10 cm cone type (x2) Super woofer: 13 cm cone type (x2)
Rear speaker	8 cm cone type (x2)

General

Power requirement	US, Canadian model : 120V AC, 60Hz AEP, UK, German, Malaysia, Singapore, Chinese, Australian model : 220 – 230 V AC, 50/60 Hz
Power consumption	US model : 110 W Canadian model : 120 W AEP, UK, German, Malaysia, Singapore, Chinese, Australian model : 80 W

— Continued on next page —

HOME THEATER ACTIVE SPEAKER SYSTEM

SONY®

Dimensions	Approx. 180 x 1040 x 290 mm (w/h/d) ($7\,^{1}/_{8}$ x 41 x $11\,^{2}/_{5}$ inches) Approx. 250 x 1040 x 360 mm (w/h/d, including speaker base) ($9\,^{6}/_{7}$ x 41 x $14\,^{5}/_{8}$ inches)
Mass	Front (L): 16 kg (35 lb 3 oz) Front (R): 13 kg (28 lb 9 oz) Rear: 700 g/pc (1 lb 9 oz)
Supplied accessories	Rear speakers SS-SR151 (2) Front L/R speaker connecting cord, 3.5 m (1) Rear speaker connecting cord, 10 m (2) Audio connecting cord, 1.5 m (1) Remote Commander RM-J15 (1) Sony batteries SUM-3 (NS) (2)

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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SERVICE NOTE

[FL all light up mode]

While pressing the MASTER VOL+ button, insert the power plug into the power supply inlet.

[AUTO POWER SAVE MECHANISM]

A part of circuit on this unit will stop to economize in power if it has no signal after more than three minutes.
If a sound is input again, the normal circuit will operate.

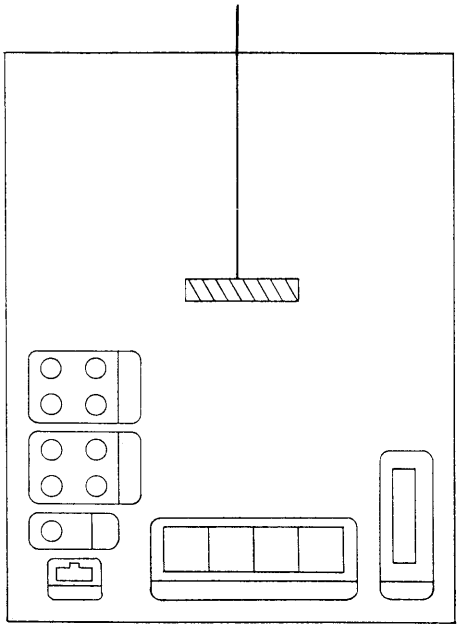
ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

MODEL IDENTIFICATION

— BACK PANEL —

4-974-284-0□ : US Model
4-974-284-1□ : CND Model
4-974-284-2□ : AEP, G Model
4-974-284-3□ : UK Model



- For detailed SP, MY, CH model of refer to AEP model
- For detailed AUS model of refer to UK model

Note:

- Abbreviation
  CND : Canadian model.
  G : German model.
  SP : Singapore model.
  MY : Malaysia model.
  AUS : Australian model.
  CH : Chinese model.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.

2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

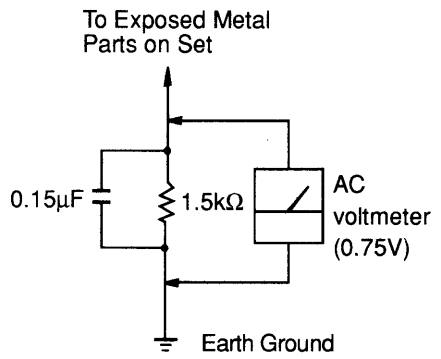
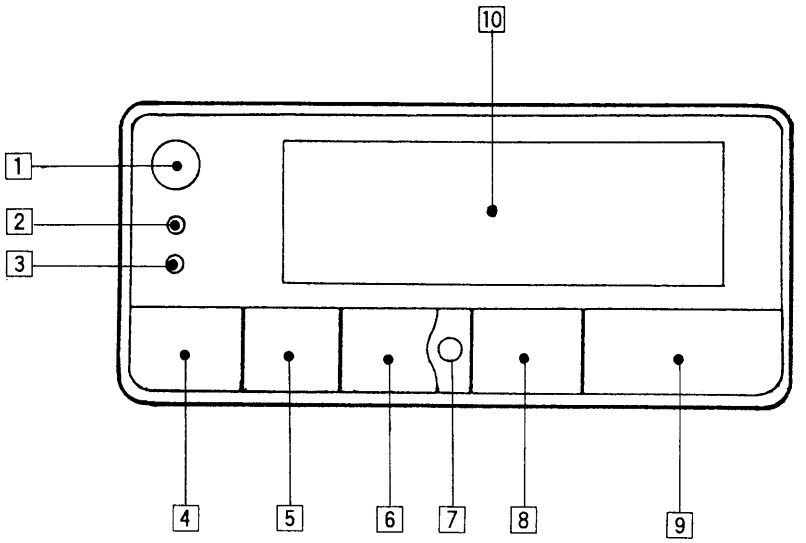


Fig. A. Using an AC voltmeter to check AC leakage.

SECTION 1
GENERAL

Front Panel



1 Remote sensor
2 AC STANDBY indicator
3 POWER indicator
4 POWER button
5 INPUT button
6 SURROUND button
7 CENTER MODE button
8 S. WOOFER button
9 MASTER VOL (+/–) button
10 Display window

This section is extracted from instruction manual.

Power turns on and off automatically

The speakers turn on automatically when a sound signal is input and turn off when you've finished watching a program and the sound signal goes out. So you don't have to bother using the power switch every time you use the system.

The speakers turn on and off automatically (Auto power on/off function)

Three minutes after the sound signal goes out (when you turn off the TV, or the currently playing video/laserdisc ends), the speakers turn off automatically and the POWER indicator turns red.

The speakers turn themselves back on the next time you turn on the TV or start playback from the VCR.

If you press POWER when the speakers are on

They enter standby mode and the auto power on/off function does not function. You have to press POWER again to turn on the speakers.

SECTION 2
DIAGRAMS

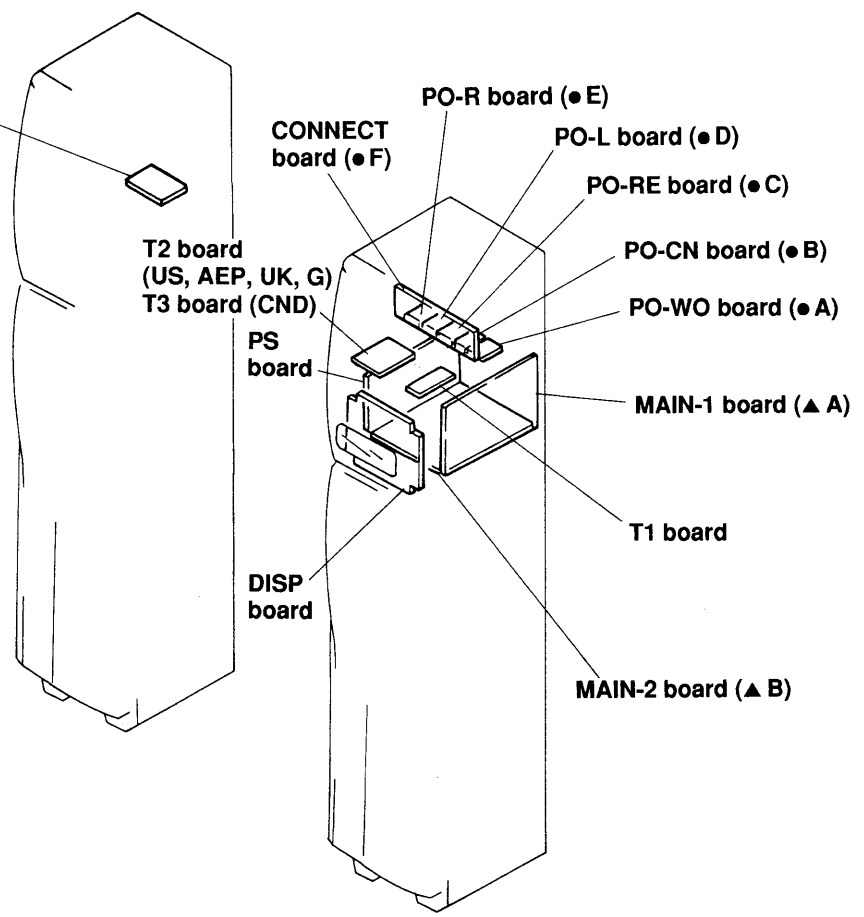
2-1. IC PIN FUNCTION

- **IC501 System Control IC (μPD78042AGF-065-3B9)**

Pin No.	Pin Name	I/O	Function
1 to 7	7G to 1G	O	FL grid control
8	VDD	–	Power supply terminal (+5V)
9	POWER RY	O	Power relay control
10	FUNC 1/2	O	Input select control (L: input 2 H: input 1)
11	PLO/DELAY-CLK	O	Dolby IC (IC103, 104) serial control
12	PLO/DELAY-CE	O	
13	PLO/DELAY-DATA	O	
14	FRONT MUT	O	Mute control ("L"=Mute)
15	CENTER EXT MUT	O	
16	S/W MUT	O	
17	$\overline{\text{RESET}}$	I	System reset
18	REAR MUT	O	Mute control ("L"=Mute)
19	CENTER MUT	O	
20	AVSS	–	GND for A/D convertor
21	CENTER EXT/INT	O	EXT/INT switching control
22, 23	——	–	Not used (Connected to GND)
24	VOL SCL	O	Dolby IC (IC103, 104) serial control
25	——	–	Not used (Connected to GND)
26	SW1	I	Audio signal detection (L: Sound input H: No sound input)
27	KEY 1	I	Key input (analog)
28	KEY 0	I	
29	AVDD	–	Analog power supply for A/D convertor
30	AVREF	–	Reference voltage for A/D convertor
31	STOP	I	Voltage detect
32	XT2	–	Not used (open)
33	VSS	–	GND
34	X1	I	Oscillation crystal (5 MHz) for main system clock
35	X2	O	
36	S/W BOOST	O	SUB WOOFER boost control (H: off L: on)
37	S/W VOL-CE	O	S. WOOFER VOL (IC403) serial control
38	S/W VOL-DATA	O	
39	S/W VOL-CLK	O	
40	CENTER EXT-SW	I	Connecting detection of external center output (L: Connecting signal input H: No connecting signal input)

Pin No.	Pin Name	I/O	Function
41	CONT SIRCS	I	Remote control input (outside)
42, 43	——	–	Not used (Connected to GND)
44	INT SIRCS	I	Remote control signal input
45	VOL SDA-2	O	} Electrical volume IC (IC203, 204) serial control
46	VOL SDA-1	O	
47	EXT SIRCS	I	Remote control input (outside)
48	IC	–	Internal connecting (Connected to GND)
49	STANDBY LED	O	} LED control (L: Lighting)
50	OPRATE LED	O	
51	READY LED	O	
52	VDD	–	Power supply (+5V)
53 to 70	S24 to S27	O	FL segment control
71	VLOAD	–	Power supply (–19V) for indication control
72 to 77	S6 to S1	O	FL segment control
78 to 80	10G to 8G	O	FL grid control

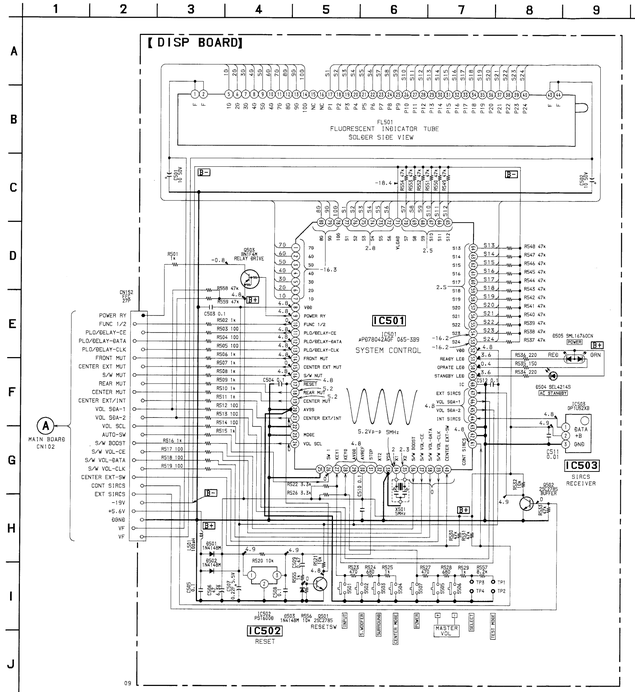
2-2. CIRCUIT BOARDS LOCATION



NOTE : ▲ A and ▲ B are including in MAIN board. ● A – ● F are including in POWER board.

- Abbreviation
  CND : Canadian model.
  G : German model.

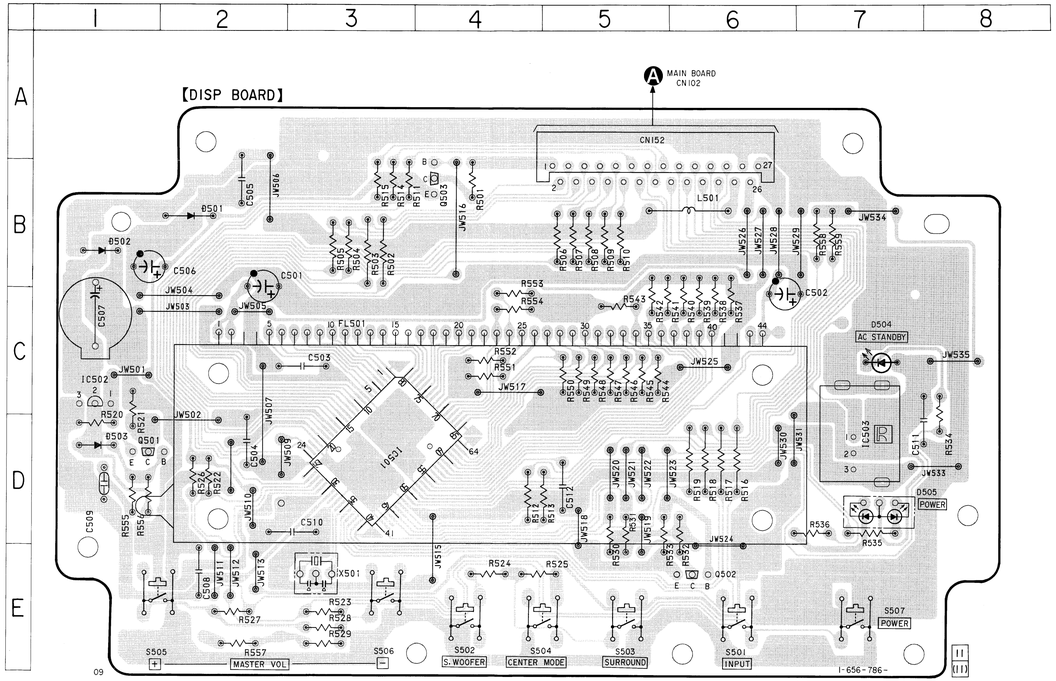
2-3. SCHEMATIC DIAGRAM — DISPLAY SECTION —



NOTE

- All capacitors are in μF unless otherwise noted. pF: μμF
  50WV or less are not indicated except for electrolytics and tantaliums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ : Internal component.
- ▭ : Panel designation.
- B+ : B+ Line.
- B− : B− Line.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark: FL all light up (See Page 2)
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.

2-4. PRINTED WIRING BOARD — DISPLAY SECTION —



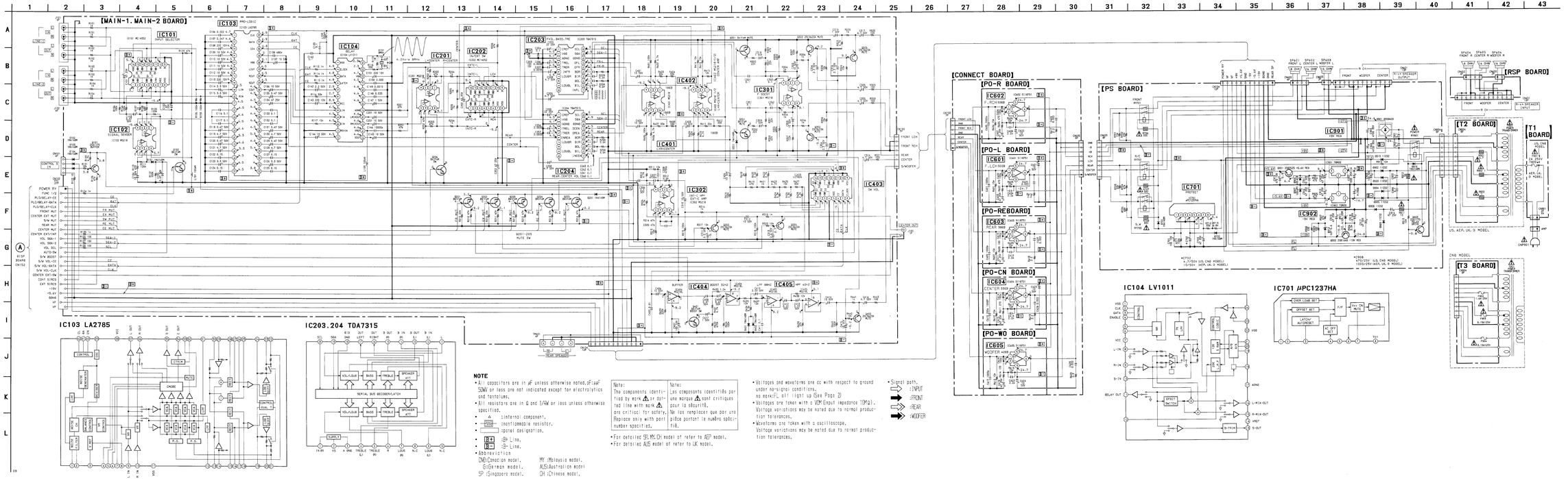
- **Semiconductor Location**

Ref. No.	Location
D501	B-2
D502	B-1
D503	D-1
D504	C-7
D505	D-7
IC501	D-3
IC502	C-1
IC503	D-7
Q501	D-1
Q502	E-6
Q503	B-4

Note:

- ○—○ : parts extracted from the component side.
- △ : internal component.
- ▨▨▨ : Pattern from the side which enable seeing.

2-5. SCHEMATIC DIAGRAM — MAIN SECTION —



NOTE

- All capacitors are in μF unless otherwise noted. pF: μμF. 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ : internal component.
- ⊣⊢ : nonflammable resistor.
- ⊣⊢ : special component.
- B+ : B+ Line.
- B- : B- Line.
- Abbreviation
  CND : Canadian model. MY : Malaysia model.
  G : German model. AUS : Australian model.
  SP : Singapore model. CH : Chinese model.

Note:	Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

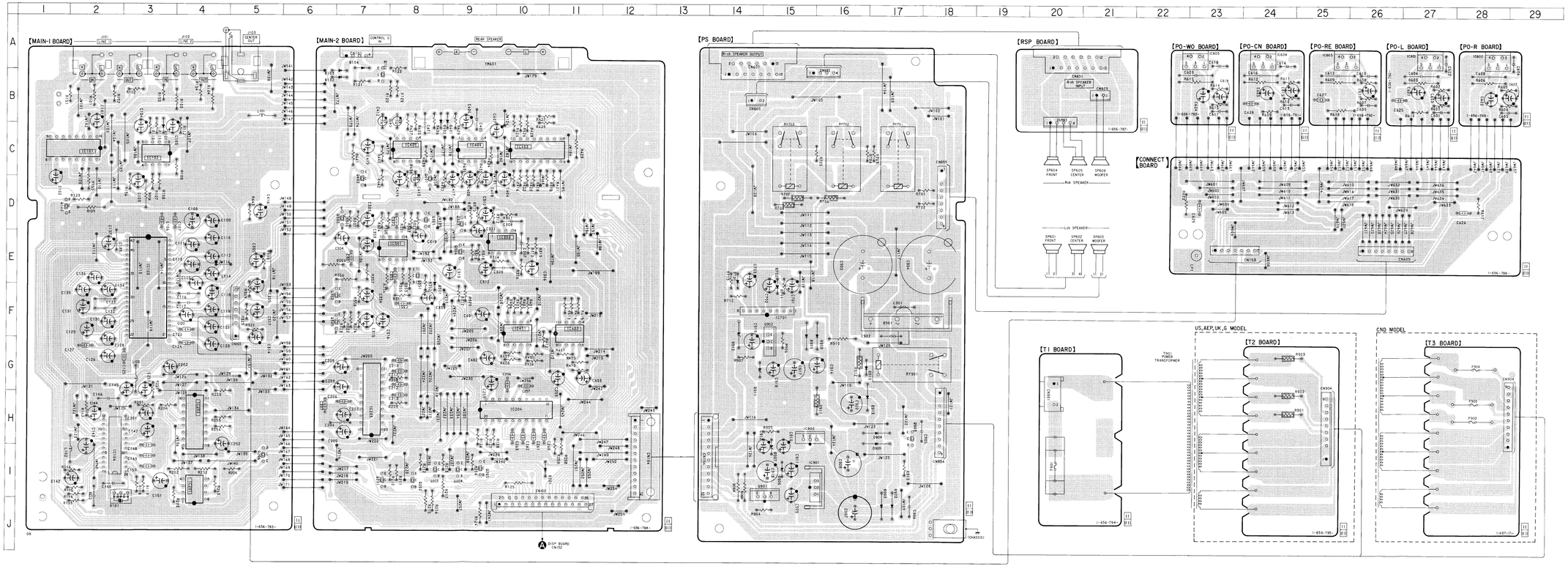
- For detailed SFL MX CH model of refer to AEP model.
- For detailed AUS model of refer to UK model.

- Voltages and waveforms are dc with respect to ground under no-signal conditions. no mark:FL off, light up (See Page 2)
- Voltages are taken with a VOM (input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilliscope. Voltage variations may be noted due to normal production tolerances.

- Signal path.
  ⇨ : INPUT
  ➡ : FRONT
  ⇨ : REAR
  ➡ : WOOFER

2-6. PRINTED WIRING BOARD — MAIN SECTION —

• See page 6 for Circuit Boards Location.



• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D101	C-3	IC401	F-10
D102	B-6	IC402	F-11
D103	B-6	IC403	C-10
D104	A-7	IC404	C-9
D201	I-11	IC405	C-8
D301	F-9	IC601	A-27
D401	C-9	IC602	A-28
D402	C-9	IC603	A-25
D701	E-14	IC604	A-24
D702	E-15	IC605	A-23
D901	F-17	IC701	F-15
D902	J-17	IC901	I-16
D903	J-17	IC902	H-15
D904	H-17		
D905	I-17	Q101	A-7
D906	I-15	Q102	D-1
D907	I-15	Q201	I-7
D908	G-16	Q202	I-8
D909	G-15	Q203	I-8
D910	G-17	Q204	I-9
D911	H-14	Q205	I-9
D912	G-14	Q206	I-5
D913	H-17	Q301	D-8
		Q302	D-7
IC101	C-2	Q303	D-9
IC102	C-3	Q304	E-9
IC103	E-3	Q305	F-6
IC104	I-2	Q351	F-8
IC201	I-4	Q352	F-6
IC202	H-4	Q401	D-8
IC203	H-7	Q402	D-7
IC204	H-10	Q901	I-15
IC301	E-8	Q902	F-15
IC302	E-10	Q903	H-17

Note:

- ⟷ : parts extracted from the component side.
- △ : internal component.
- ▒ : Pattern from the side which enable seeing.
- Abbreviation
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  CH : Chinese model.
- For detailed SP, MY, CH model of refer to AEP model
- For detailed AUS model of refer to UK model

SECTION 3
EXPLODED VIEWS

NOTE:

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

- Abbreviation
  CND : Canadian model
  G : German model
  AUS : Australian model
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  CH : Chinese model
- For detailed SP, MY, CH model of refer to AEP model
- For detailed AUS model of refer to UK model

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Replace only with part number specified.

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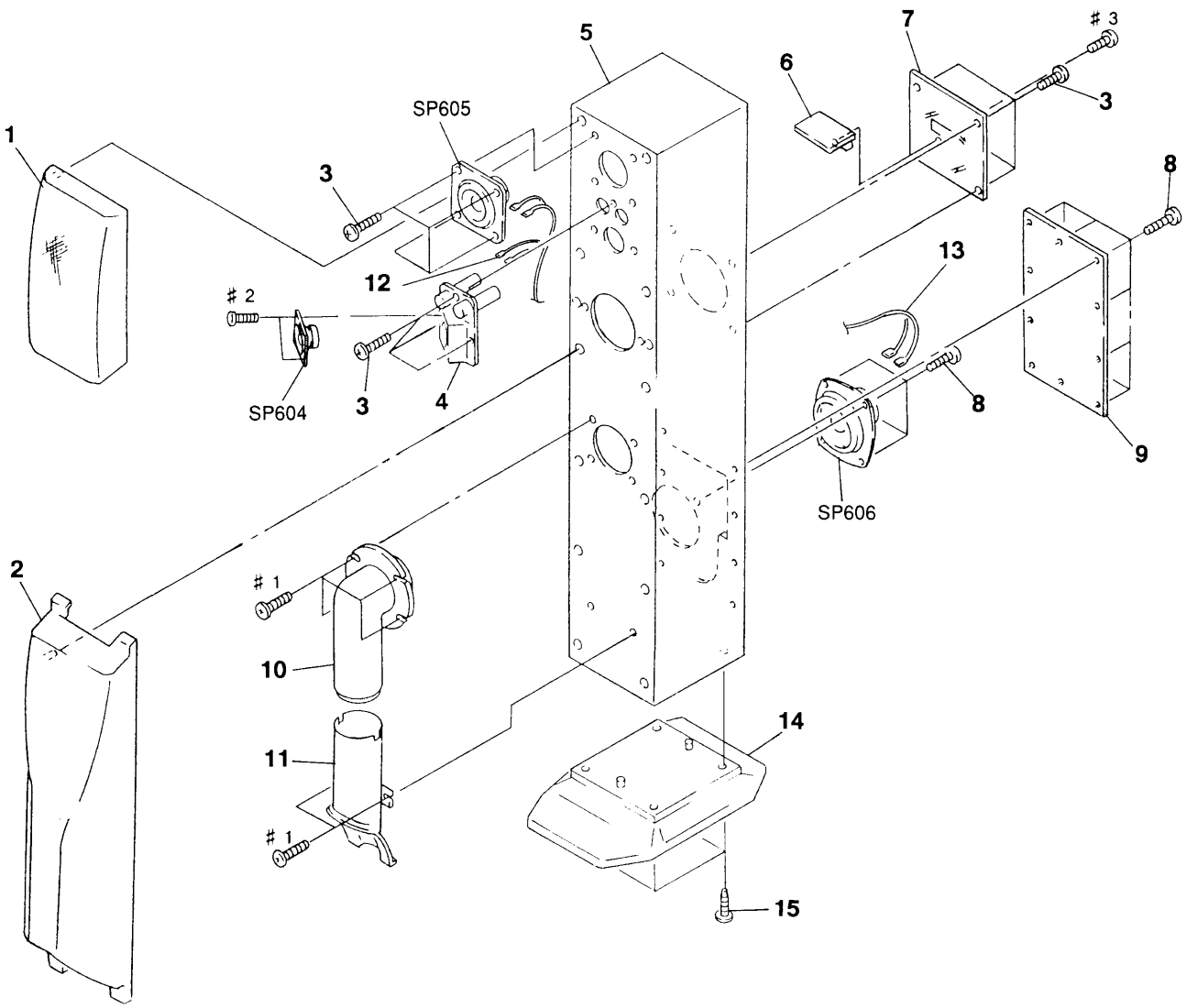
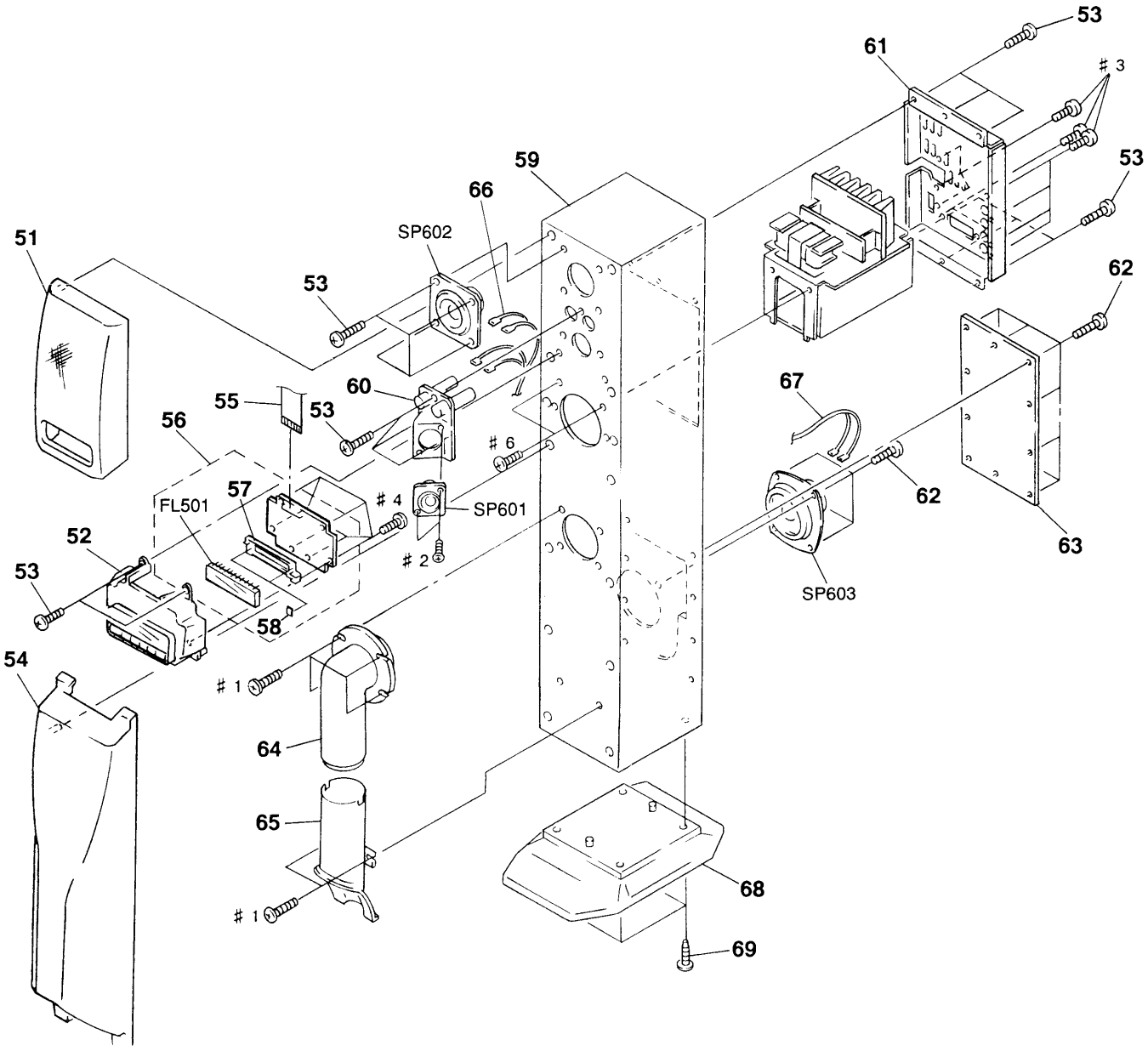
3-1. R SPEAKER SYSTEM SECTION



Ref. No.	Part No.	Description	Remark
1	X-4945-944-1	FRAME (R) ASSY, GRILLE	
* 2	4-973-506-01	PANEL, FRONT	
3	4-914-518-11	SCREW (4X14), (+) (B) TAPPING	
* 4	4-975-254-01	FRAME (R), TWEETER	
* 5	A-4361-507-A	CABINET (R) ASSY, SPEAKER(US, CND, AEP, UK)	
* 5	A-4361-742-A	CABINET (R) ASSY, SPEAKER(G)	
* 6	1-656-787-11	RSP BOARD	
* 7	4-974-287-01	PANEL (R), BACK	
8	4-907-233-11	SCREW (4X25), TAPPING	
* 9	4-973-511-01	COVER (W)	

Ref. No.	Part No.	Description	Remark
* 10	4-973-512-01	DUCT (LS)	
* 11	4-973-514-01	DUCT (T) (US, CND, AEP, UK)	
* 11	4-974-281-01	DUCT (T) (G)	
12	1-775-760-11	CORD, CONNECTION	
13	1-769-815-11	CORD, CONNECTION	
14	4-973-509-01	BASE	
15	4-976-546-01	BASE SCREW (4X18)	
SP604	1-504-874-11	SPEAKER (5CM) (FRONT)	
SP605	1-504-875-11	SPEAKER (10CM) (CENTER)	
SP606	1-504-876-11	SPEAKER (13CM) (WOOFER)	

3-2. L SPEAKER SYSTEM SECTION



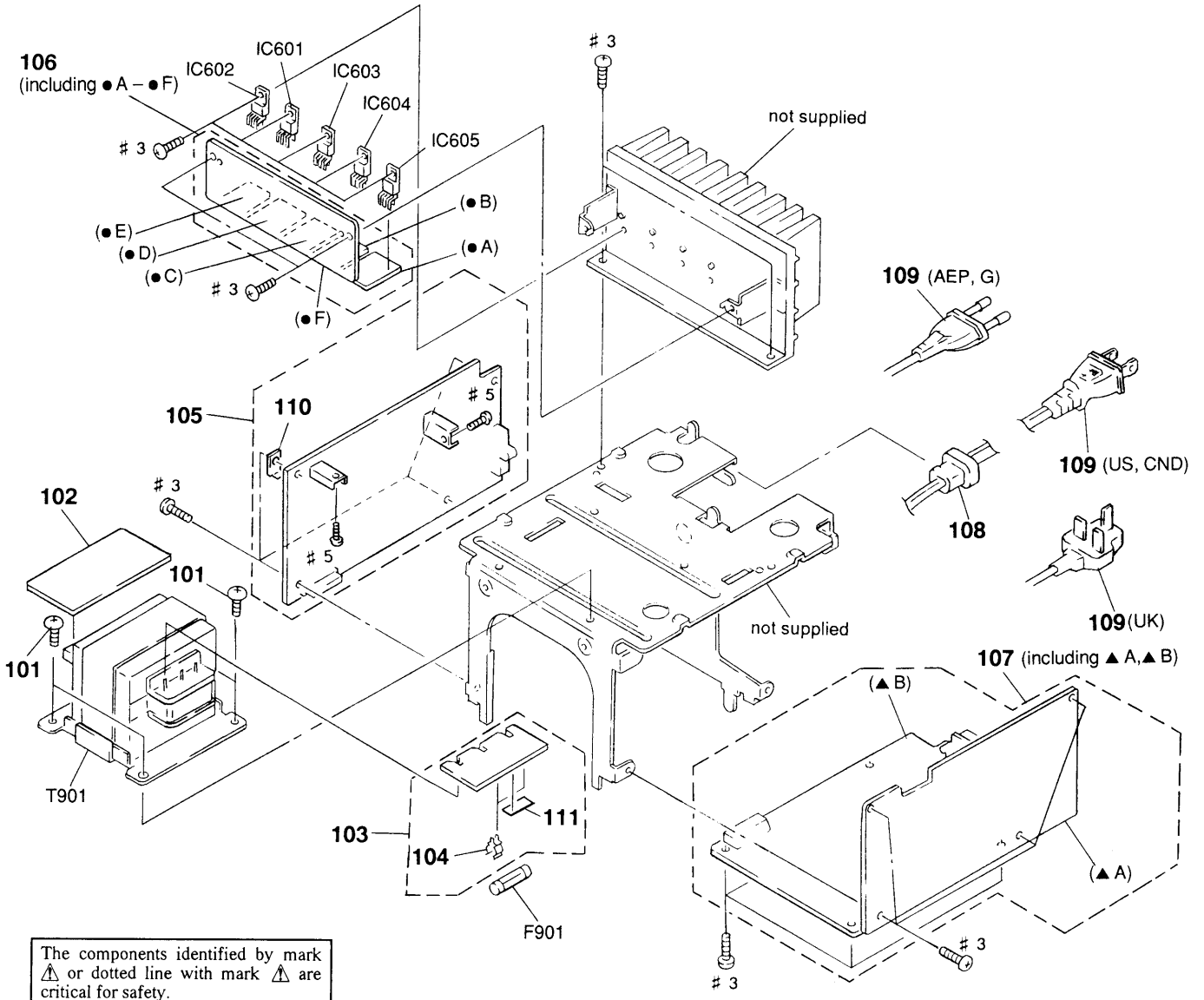
Ref. No.	Part No.	Description	Remark
51	X-4945-943-1	FRAME (L) ASSY, GRILLE	
52	X-4945-942-1	PANEL ASSY, CONTROL	
53	4-914-518-11	SCREW (4X14), (+) (B) TAPPING	
* 54	4-973-506-01	PANEL, FRONT	
55	1-765-348-11	WIRE (FLAT TYPE) (27 CORE)	
* 56	A-4378-000-A	DISP BOARD, COMPLETE	
* 57	4-974-291-01	HOLDER, FL TUBE	
* 58	4-921-941-01	CUSHION (FL)	
* 59	A-4361-505-A	CABINET (L) ASSY, SPEAKER(US, CND, AEP, UK)	
* 59	A-4361-744-A	CABINET (L) ASSY, SPEAKER(G)	
* 60	4-973-510-01	FRAME (L), TWEETER	
* 61	4-974-284-01	PANEL (L), BACK (US)	
* 61	4-974-284-11	PANEL (L), BACK (CND)	
* 61	4-974-284-21	PANEL (L), BACK (AEP, G)	
* 61	4-974-284-31	LANEL (L), BACK (UK)	

Ref. No.	Part No.	Description	Remark
62	4-907-233-11	SCREW (4X25), TAPPING	
* 63	4-973-511-01	COVER (W)	
* 64	4-973-512-01	DUCT (LS)	
* 65	4-973-514-01	DUCT (T) (US, CND, AEP, UK)	
* 65	4-974-281-01	DUCT (T) (G)	
66	1-775-759-11	CORD, CONNECTION	
67	1-769-811-11	CORD, CONNECTION	
68	4-973-509-01	BASE	
69	4-976-546-01	BASE SCREW (4X18)	
FL501	1-517-424-11	INDICATOR TUBE, FLUORESCENT	
SP601	1-504-874-11	SPEAKER (5CM) (FRONT)	
SP602	1-504-875-11	SPEAKER (10CM) (CENTER)	
SP603	1-504-876-11	SPEAKER (13CM) (WOOFER)	

3-3. POWER SUPPLY SECTION

▲A MAIN-1 board
▲B MAIN-2 board

●A PO-WO board
●B PO-CN board
●C PO-RE board
●D PO-L board
●E PO-R board
●F CONNECT board



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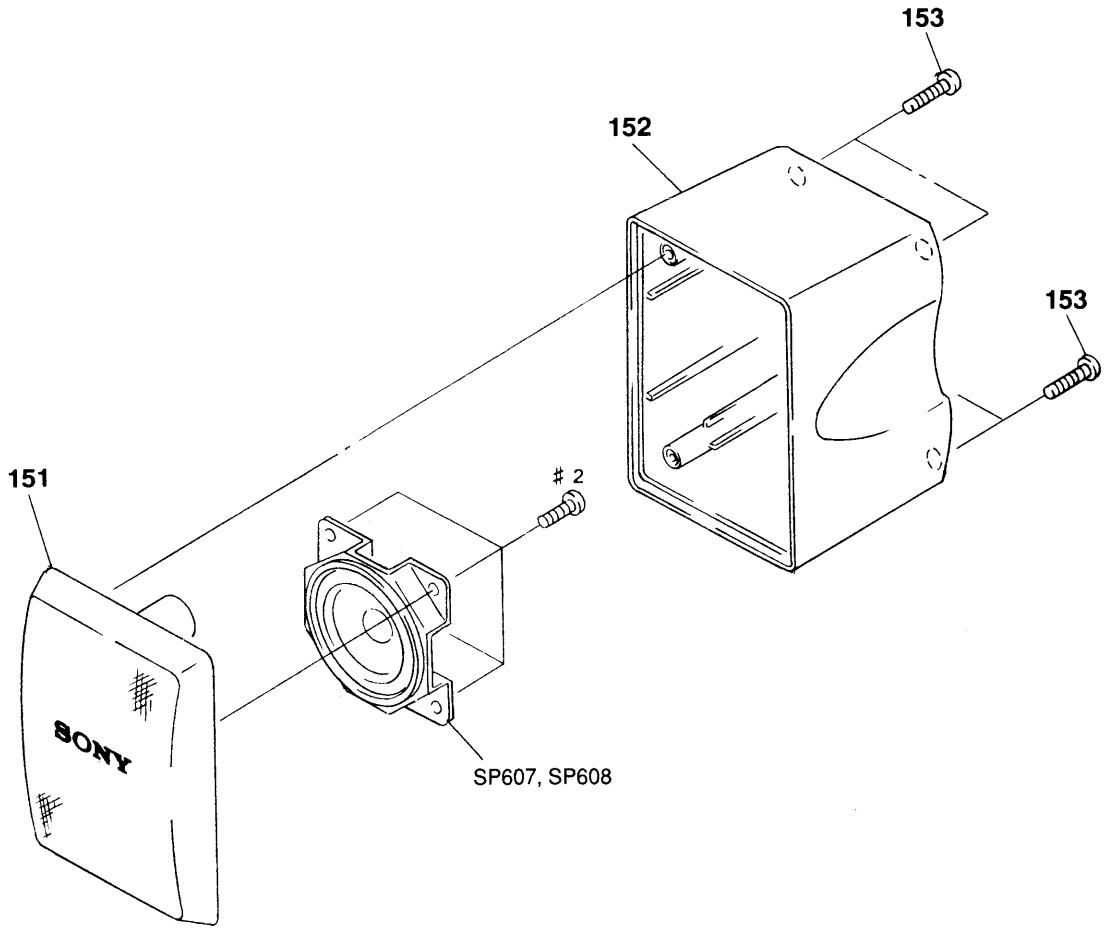
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
101	4-381-962-11	SCREW +BVTT 4X8 (S)	
* 102	1-656-795-11	T2 BOARD (US, AEP, UK, G)	
* 102	1-657-171-11	T3 BOARD (CND)	
* 103	1-656-794-11	T1 BOARD	
104	1-533-293-11	FUSE HOLDER	
* 105	A-4377-999-A	PS BOARD, COMPLETE (US, CND)	
* 105	A-4378-713-A	PS BOARD, COMPLETE (AEP, UK, G)	
* 106	A-4378-002-A	POWER BOARD, COMPLETE	
* 107	A-4377-998-A	MAIN BOARD, COMPLETE	
* 108	3-703-244-00	BUSHING (2104), CORD	
⚠109	1-575-042-21	CORD, POWER (US, CND)	
⚠109	1-575-651-21	CORD, POWER (AEP, G)	
⚠109	1-751-529-11	CORD, POWER (UK)	
110	1-537-770-21	TERMINAL BOARD, GROUND	
111	3-703-044-26	LABEL, CAUTION (US, CND)	
⚠F901	1-532-215-00	FUSE (T800mA) (AEP, UK, G)	
⚠F901	1-576-104-21	FUSE (2A 250V) (US, CND)	
IC601	8-759-502-31	IC SI-18751	
IC602	8-759-502-31	IC SI-18751	
IC603	8-759-502-31	IC SI-18751	
IC604	8-759-502-31	IC SI-18751	
IC605	8-759-502-31	IC SI-18751	
⚠T901	1-427-956-11	TRANSFORMER, POWER (US, CND)	
⚠T901	1-427-957-11	TRANSFORMER, POWER (AEP, G, UK)	

3-4. REAR SPEAKER SYSTEM SECTION (SS-SR151)



Ref. No.	Part No.	Description	Remark
151	X-4946-077-1	PANEL ASSY, FRONT	
152	X-4946-078-1	CABINET ASSY, SPEAKER	
153	4-929-125-01	SCREW (M4X16), TAPPING	

Ref. No.	Part No.	Description	Remark
SP607	1-504-877-11	SPEAKER (8CM) (SURROUND)	
SP608	1-504-877-11	SPEAKER (8CM) (SURROUND)	

SECTION 4
ELECTRICAL PARTS LIST

DISP

NOTE:

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- For detailed SP, MY, CH model of refer to AEP model
- For detailed AUS model of refer to UK model
- SEMICONDUCTORS
  In each case, u: μ , for example:
  uA...: μA..., uPA...: μPA..., uPB...: μPB..., uPC...: μPC..., uPD...: μPD...
- CAPACITORS
  uF : μF
- COILS
  uH : μH
- Abbreviation
  CND : Canadian model
  G : German model
  AUS : Australian model
  SP : Singapore model
  MY : Malaysia model
  CH : Chinese model

Ref.No.	Part No.	Description				Remark
*	A-4378-000-A	DISP BOARD, COMPLETE				
		**********				
*	4-921-941-01	CUSHION (FL)				
*	4-974-291-01	HOLDER, FL TUBE				
		< CAPACITOR >				
C501	1-124-261-00	ELECT	10uF	20%	50V	
C502	1-124-261-00	ELECT	10uF	20%	50V	
C503	1-164-159-21	CERAMIC	0.1uF		50V	
C504	1-164-159-21	CERAMIC	0.1uF		50V	
C505	1-164-159-21	CERAMIC	0.1uF		50V	
C506	1-126-154-11	ELECT	47uF	20%	6.3V	
C507	1-104-905-11	DOUBLE LAYERS	0.22F		5.5V	
C508	1-164-159-21	CERAMIC	0.1uF		50V	
C509	1-136-173-00	FILM	0.47uF	5%	50V	
C510	1-164-159-21	CERAMIC	0.1uF		50V	
C511	1-162-306-11	CERAMIC	0.01uF	30%	16V	
C512	1-164-159-21	CERAMIC	0.1uF		50V	
		< CONNECTOR >				
* CN152	1-568-869-11	SOCKET, CONNECTOR 27P				
		< DIODE >				
D501	8-719-987-63	DIODE	1N4148M			
D502	8-719-987-63	DIODE	1N4148M			
D503	8-719-987-63	DIODE	1N4148M			
D504	8-719-304-31	DIODE	SEL4214S (AC STANDBY)			
D505	8-719-045-89	DIODE	SML16760CN (POWER)			
		< FLUORESCENT INDICATOR >				
FL501	1-517-424-11	INDICATOR TUBE, FLUORESCENT				
		< IC >				
IC501	8-759-360-68	IC	uPD78042AGF-065-3B9			
IC502	8-759-165-81	IC	PST600D-T			
IC503	8-749-920-83	IC	GP1U52XB			
		< COIL >				
L501	1-410-521-11	INDUCTOR	100uH			

Ref.No.	Part No.	Description				Remark
		< TRANSISTOR >				
Q501	8-729-119-78	TRANSISTOR	2SC403SP-51			
Q502	8-729-119-78	TRANSISTOR	2SC403SP-51			
Q503	8-729-900-63	TRANSISTOR	DTA124ES			
		< RESISTOR >				
R501	1-249-417-11	CARBON	1K	5%	1/4W	F
R502	1-249-417-11	CARBON	1K	5%	1/4W	F
R503	1-247-807-31	CARBON	100	5%	1/4W	
R504	1-247-807-31	CARBON	100	5%	1/4W	
R505	1-247-807-31	CARBON	100	5%	1/4W	
R506	1-249-417-11	CARBON	1K	5%	1/4W	F
R507	1-249-417-11	CARBON	1K	5%	1/4W	F
R508	1-249-417-11	CARBON	1K	5%	1/4W	F
R509	1-249-417-11	CARBON	1K	5%	1/4W	F
R510	1-249-417-11	CARBON	1K	5%	1/4W	F
R511	1-249-417-11	CARBON	1K	5%	1/4W	F
R512	1-247-807-31	CARBON	100	5%	1/4W	
R513	1-247-807-31	CARBON	100	5%	1/4W	
R514	1-247-807-31	CARBON	100	5%	1/4W	
R515	1-249-417-11	CARBON	1K	5%	1/4W	F
R516	1-249-417-11	CARBON	1K	5%	1/4W	F
R517	1-247-807-31	CARBON	100	5%	1/4W	
R518	1-247-807-31	CARBON	100	5%	1/4W	
R519	1-247-807-31	CARBON	100	5%	1/4W	
R520	1-249-429-11	CARBON	10K	5%	1/4W	
R521	1-249-429-11	CARBON	10K	5%	1/4W	
R522	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R523	1-249-413-11	CARBON	470	5%	1/4W	F
R524	1-249-415-11	CARBON	680	5%	1/4W	F
R525	1-249-417-11	CARBON	1K	5%	1/4W	F
R526	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R527	1-249-413-11	CARBON	470	5%	1/4W	F
R528	1-249-415-11	CARBON	680	5%	1/4W	F
R529	1-249-417-11	CARBON	1K	5%	1/4W	F
R530	1-249-437-11	CARBON	47K	5%	1/4W	
R531	1-249-437-11	CARBON	47K	5%	1/4W	
R532	1-249-429-11	CARBON	10K	5%	1/4W	
R533	1-249-437-11	CARBON	47K	5%	1/4W	
R534	1-247-815-91	CARBON	220	5%	1/4W	
R535	1-249-407-11	CARBON	150	5%	1/4W	F

DISP **MAIN**

Consisting the following section in the main.
(MAIN-1/MAIN-2)

Ref. No.	Part No.	Description				Remark
R536	1-247-815-91	CARBON	220	5%	1/4W	
R537	1-249-437-11	CARBON	47K	5%	1/4W	
R538	1-249-437-11	CARBON	47K	5%	1/4W	
R539	1-249-437-11	CARBON	47K	5%	1/4W	
R540	1-249-437-11	CARBON	47K	5%	1/4W	
R541	1-249-437-11	CARBON	47K	5%	1/4W	
R542	1-249-437-11	CARBON	47K	5%	1/4W	
R543	1-249-437-11	CARBON	47K	5%	1/4W	
R544	1-249-437-11	CARBON	47K	5%	1/4W	
R545	1-249-437-11	CARBON	47K	5%	1/4W	
R546	1-249-437-11	CARBON	47K	5%	1/4W	
R547	1-249-437-11	CARBON	47K	5%	1/4W	
R548	1-249-437-11	CARBON	47K	5%	1/4W	
R549	1-249-437-11	CARBON	47K	5%	1/4W	
R550	1-249-437-11	CARBON	47K	5%	1/4W	
R551	1-249-437-11	CARBON	47K	5%	1/4W	
R552	1-249-437-11	CARBON	47K	5%	1/4W	
R553	1-249-437-11	CARBON	47K	5%	1/4W	
R554	1-249-437-11	CARBON	47K	5%	1/4W	
R555	1-249-417-11	CARBON	1K	5%	1/4W	F
R556	1-249-429-11	CARBON	10K	5%	1/4W	
R557	1-249-428-11	CARBON	8.2K	5%	1/4W	F
R558	1-249-437-11	CARBON	47K	5%	1/4W	
R559	1-249-437-11	CARBON	47K	5%	1/4W	
		< SWITCH >				
S501	1-554-303-21	SWITCH, TACTILE (INPUT)				
S502	1-554-303-21	SWITCH, TACTILE (S. WOOFER)				
S503	1-554-303-21	SWITCH, TACTILE (SURROUND)				
S504	1-554-303-21	SWITCH, TACTILE (CENTER MODE)				
S505	1-554-303-21	SWITCH, TACTILE (+)				
S506	1-554-303-21	SWITCH, TACTILE (-)				
S507	1-554-303-21	SWITCH, TACTILE (POWER)				
		< VIBRATOR >				
X501	1-579-233-11	VIBRATOR, CERAMIC (5MHz)				
**********						
*	A-4377-998-A	MAIN BOARD, COMPLETE				
		**********				
		(Including MAIN-1, MAIN-2 BOARD)				
		< CAPACITOR >				
C101	1-124-477-11	ELECT	47uF	20%	25V	
C102	1-124-477-11	ELECT	47uF	20%	25V	
C103	1-124-902-00	ELECT	0.47uF	20%	50V	
C104	1-124-907-11	ELECT	10uF	20%	50V	
C105	1-124-902-00	ELECT	0.47uF	20%	50V	
C106	1-130-487-00	MYLAR	0.022uF	5%	50V	
C107	1-130-491-00	MYLAR	0.047uF	5%	50V	
C108	1-104-666-11	ELECT	220uF	20%	10V	
C109	1-124-907-11	ELECT	10uF	20%	50V	
C110	1-124-907-11	ELECT	10uF	20%	50V	
C111	1-124-907-11	ELECT	10uF	20%	50V	
C112	1-124-907-11	ELECT	10uF	20%	50V	
C113	1-104-666-11	ELECT	220uF	20%	10V	
C114	1-126-962-11	ELECT	3.3uF	20%	50V	
C115	1-126-962-11	ELECT	3.3uF	20%	50V	
C116	1-164-159-21	CERAMIC	0.1uF		50V	
C117	1-164-159-21	CERAMIC	0.1uF		50V	
C118	1-124-902-00	ELECT	0.47uF	20%	50V	
C119	1-126-963-11	ELECT	4.7uF	20%	50V	
C120	1-124-902-00	ELECT	0.47uF	20%	50V	
C121	1-126-963-11	ELECT	4.7uF	20%	50V	
C122	1-136-167-00	FILM	0.15uF	5%	50V	
C123	1-126-962-11	ELECT	3.3uF	20%	50V	
C124	1-136-167-00	FILM	0.15uF	5%	50V	
C125	1-136-167-00	FILM	0.15uF	5%	50V	
C126	1-126-962-11	ELECT	3.3uF	20%	50V	
C127	1-136-167-00	FILM	0.15uF	5%	50V	
C128	1-126-963-11	ELECT	4.7uF	20%	50V	
C129	1-124-902-00	ELECT	0.47uF	20%	50V	
C130	1-126-963-11	ELECT	4.7uF	20%	50V	
C131	1-124-902-00	ELECT	0.47uF	20%	50V	
C132	1-164-159-21	CERAMIC	0.1uF		50V	
C133	1-164-159-21	CERAMIC	0.1uF		50V	
C134	1-124-477-11	ELECT	47uF	20%	25V	
C135	1-124-902-00	ELECT	0.47uF	20%	50V	
C136	1-124-907-11	ELECT	10uF	20%	50V	
C137	1-124-907-11	ELECT	10uF	20%	50V	
C138	1-162-292-31	CERAMIC	680PF	10%	50V	
C139	1-164-159-21	CERAMIC	0.1uF		50V	
C140	1-164-159-21	CERAMIC	0.1uF		50V	
C142	1-124-925-11	ELECT	2.2uF	20%	100V	
C143	1-104-666-11	ELECT	220uF	20%	10V	
C144	1-124-907-11	ELECT	10uF	20%	50V	
C145	1-124-907-11	ELECT	10uF	20%	50V	
C146	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C147	1-124-903-11	ELECT	1uF	20%	50V	
C148	1-130-489-00	MYLAR	0.033uF	5%	50V	
C149	1-164-087-11	CERAMIC	0.0015uF	10%	50V	
C150	1-130-489-00	MYLAR	0.033uF	5%	50V	
C151	1-104-666-11	ELECT	220uF	20%	10V	
C201	1-124-907-11	ELECT	10uF	20%	50V	
C202	1-124-477-11	ELECT	47uF	20%	25V	
C203	1-124-443-00	ELECT	100uF	20%	10V	
C204	1-164-159-21	CERAMIC	0.1uF		50V	
C205	1-126-233-11	ELECT	22uF	20%	50V	
C206	1-130-477-00	MYLAR	0.0033uF	5%	50V	
C207	1-130-477-00	MYLAR	0.0033uF	5%	50V	

Ref.No.	Part No.	Description			Remark
C208	1-126-963-11	ELECT	4.7uF	20%	50V
C209	1-126-963-11	ELECT	4.7uF	20%	50V
C210	1-136-165-00	FILM	0.1uF	5%	50V
C211	1-136-165-00	FILM	0.1uF	5%	50V
C212	1-136-165-00	FILM	0.1uF	5%	50V
C213	1-136-165-00	FILM	0.1uF	5%	50V
C251	1-124-907-11	ELECT	10uF	20%	50V
C252	1-124-477-11	ELECT	47uF	20%	25V
C255	1-126-233-11	ELECT	22uF	20%	50V
C256	1-130-477-00	MYLAR	0.0033uF	5%	50V
C257	1-130-477-00	MYLAR	0.0033uF	5%	50V
C259	1-126-963-11	ELECT	4.7uF	20%	50V
C260	1-136-165-00	FILM	0.1uF	5%	50V
C261	1-136-165-00	FILM	0.1uF	5%	50V
C262	1-136-165-00	FILM	0.1uF	5%	50V
C263	1-136-165-00	FILM	0.1uF	5%	50V
C301	1-136-165-00	FILM	0.1uF	5%	50V
C302	1-136-165-00	FILM	0.1uF	5%	50V
C303	1-124-907-11	ELECT	10uF	20%	50V
C304	1-124-925-11	ELECT	2.2uF	20%	100V
C305	1-126-963-11	ELECT	4.7uF	20%	50V
C306	1-124-925-11	ELECT	2.2uF	20%	100V
C307	1-162-600-11	CERAMIC	0.0047uF	20%	16V
C308	1-162-600-11	CERAMIC	0.0047uF	20%	16V
C309	1-162-215-31	CERAMIC	47PF	5%	50V
C310	1-124-907-11	ELECT	10uF	20%	50V
C311	1-124-925-11	ELECT	2.2uF	20%	100V
C312	1-124-907-11	ELECT	10uF	20%	50V
C313	1-124-925-11	ELECT	2.2uF	20%	100V
C314	1-126-963-11	ELECT	4.7uF	20%	50V
C315	1-124-903-11	ELECT	1uF	20%	50V
C316	1-124-925-11	ELECT	2.2uF	20%	100V
C317	1-126-963-11	ELECT	4.7uF	20%	50V
C318	1-124-903-11	ELECT	1uF	20%	50V
C351	1-136-165-00	FILM	0.1uF	5%	50V
C352	1-136-165-00	FILM	0.1uF	5%	50V
C353	1-124-907-11	ELECT	10uF	20%	50V
C354	1-124-925-11	ELECT	2.2uF	20%	100V
C355	1-126-963-11	ELECT	4.7uF	20%	50V
C359	1-124-903-11	ELECT	1uF	20%	50V
C401	1-124-907-11	ELECT	10uF	20%	50V
C402	1-124-907-11	ELECT	10uF	20%	50V
C403	1-124-907-11	ELECT	10uF	20%	50V
C404	1-124-907-11	ELECT	10uF	20%	50V
C405	1-162-306-11	CERAMIC	0.01uF	20%	16V
C406	1-124-907-11	ELECT	10uF	20%	50V
C407	1-124-443-00	ELECT	100uF	20%	10V
C408	1-124-902-00	ELECT	0.47uF	20%	50V
C409	1-124-902-00	ELECT	0.47uF	20%	50V
C410	1-124-252-00	ELECT	0.33uF	20%	50V

Ref.No.	Part No.	Description			Remark
C411	1-164-159-21	CERAMIC	0.1uF		50V
C412	1-124-464-11	ELECT	0.22uF	20%	50V
C413	1-124-464-11	ELECT	0.22uF	20%	50V
C414	1-124-907-11	ELECT	10uF	20%	50V
C415	1-124-907-11	ELECT	10uF	20%	50V
C416	1-126-963-11	ELECT	4.7uF	20%	50V
C417	1-124-903-11	ELECT	1uF	20%	50V
		< CONNECTOR >			
CN101	1-566-213-11	PIN, CONNECTOR 4P (CONTROL S IN)			
* CN102	1-568-842-11	SOCKET, CONNECTOR 27P			
CN104	1-770-731-11	CONNECTOR, BOARD TO BOARD 12P			
		< DIODE >			
D101	8-719-987-63	DIODE 1N4148M			
D102	8-719-987-63	DIODE 1N4148M			
D103	8-719-987-63	DIODE 1N4148M			
D104	8-719-987-63	DIODE 1N4148M			
D201	8-719-987-63	DIODE 1N4148M			
D301	8-719-987-63	DIODE 1N4148M			
D401	8-719-987-63	DIODE 1N4148M			
D402	8-719-987-63	DIODE 1N4148M			
		< IC >			
IC101	8-759-000-48	IC MC14052BCP			
IC102	8-759-634-51	IC M5218AP			
IC103	8-759-248-74	IC LA2785			
IC104	8-759-341-23	IC LV1011			
IC201	8-759-634-51	IC M5218AP			
IC202	8-759-000-48	IC MC14052BCP			
IC203	8-759-264-31	IC TDA7315			
IC204	8-759-264-31	IC TDA7315			
IC301	8-759-634-51	IC M5218AP			
IC302	8-759-634-51	IC M5218AP			
IC401	8-759-634-51	IC M5218AP			
IC402	8-759-634-51	IC M5218AP			
IC403	8-759-248-76	IC LC7824			
IC404	8-759-634-51	IC M5218AP			
IC405	8-759-634-51	IC M5218AP			
		< JACK >			
J101	1-573-028-21	JACK, PIN 4P (LINE 1)			
J102	1-573-028-21	JACK, PIN 4P (LINE 2)			
J103	1-766-580-11	PIN, JACK (CENTER OUT)			
		< COIL >			
L101	1-410-521-11	INDUCTOR 100uH			
L102	1-410-521-11	INDUCTOR 100uH			
L103	1-410-521-11	INDUCTOR 100uH			

MAIN

Ref. No.	Part No.	Description				Remark
		< TRANSISTOR >				
Q101	8-729-119-76	TRANSISTOR	2SA1175-HFE			
Q102	8-729-900-36	TRANSISTOR	DTC124ES			
Q201	8-729-900-63	TRANSISTOR	DTA124ES			
Q202	8-729-900-63	TRANSISTOR	DTA124ES			
Q203	8-729-900-63	TRANSISTOR	DTA124ES			
Q204	8-729-900-63	TRANSISTOR	DTA124ES			
Q205	8-729-900-63	TRANSISTOR	DTA124ES			
Q206	8-729-900-36	TRANSISTOR	DTC124ES			
Q301	8-729-900-36	TRANSISTOR	DTC124ES			
Q302	8-729-141-30	TRANSISTOR	2SC3623A-LK			
Q303	8-729-141-30	TRANSISTOR	2SC3623A-LK			
Q304	8-729-141-30	TRANSISTOR	2SC3623A-LK			
Q305	8-729-141-30	TRANSISTOR	2SC3623A-LK			
Q351	8-729-900-36	TRANSISTOR	DTC124ES			
Q352	8-729-141-30	TRANSISTOR	2SC3623A-LK			
Q401	8-729-900-36	TRANSISTOR	DTC124ES			
Q402	8-729-141-30	TRANSISTOR	2SC3623A-LK			
		< RESISTOR >				
R101	1-249-417-11	CARBON	1K	5%	1/4W	F
R102	1-249-417-11	CARBON	1K	5%	1/4W	F
R103	1-249-417-11	CARBON	1K	5%	1/4W	F
R104	1-249-417-11	CARBON	1K	5%	1/4W	F
R105	1-249-441-11	CARBON	100K	5%	1/4W	
R106	1-249-441-11	CARBON	100K	5%	1/4W	
R107	1-249-417-11	CARBON	1K	5%	1/4W	F
R108	1-249-415-11	CARBON	680	5%	1/4W	F
R109	1-249-441-11	CARBON	100K	5%	1/4W	
R110	1-249-413-11	CARBON	470	5%	1/4W	F
R111	1-249-441-11	CARBON	100K	5%	1/4W	
R112	1-249-441-11	CARBON	100K	5%	1/4W	
R113	1-249-417-11	CARBON	1K	5%	1/4W	F
R114	1-249-417-11	CARBON	1K	5%	1/4W	F
R115	1-249-417-11	CARBON	1K	5%	1/4W	F
R116	1-249-435-11	CARBON	33K	5%	1/4W	
R117	1-249-431-11	CARBON	15K	5%	1/4W	
R118	1-249-411-11	CARBON	330	5%	1/4W	
R119	1-247-903-00	CARBON	1M	5%	1/4W	
R120	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R121	1-249-429-11	CARBON	10K	5%	1/4W	
R122	1-249-393-11	CARBON	10	5%	1/4W	F
R123	1-249-437-11	CARBON	47K	5%	1/4W	
R124	1-249-417-11	CARBON	1K	5%	1/4W	F
R125	1-249-417-11	CARBON	1K	5%	1/4W	F
R126	1-247-807-31	CARBON	100	5%	1/4W	
R127	1-247-807-31	CARBON	100	5%	1/4W	
R128	1-247-807-31	CARBON	100	5%	1/4W	
R129	1-249-437-11	CARBON	47K	5%	1/4W	
R151	1-249-417-11	CARBON	1K	5%	1/4W	F
R152	1-249-417-11	CARBON	1K	5%	1/4W	F
R153	1-249-417-11	CARBON	1K	5%	1/4W	F
R154	1-249-417-11	CARBON	1K	5%	1/4W	F
R155	1-249-441-11	CARBON	100K	5%	1/4W	
R156	1-249-441-11	CARBON	100K	5%	1/4W	
R201	1-249-437-11	CARBON	47K	5%	1/4W	
R202	1-249-437-11	CARBON	47K	5%	1/4W	
R203	1-249-437-11	CARBON	47K	5%	1/4W	
R204	1-249-417-11	CARBON	1K	5%	1/4W	F
R205	1-249-417-11	CARBON	1K	5%	1/4W	F
R206	1-249-437-11	CARBON	47K	5%	1/4W	
R208	1-249-426-11	CARBON	5.6K	5%	1/4W	
R209	1-249-426-11	CARBON	5.6K	5%	1/4W	
R210	1-249-437-11	CARBON	47K	5%	1/4W	
R211	1-249-437-11	CARBON	47K	5%	1/4W	
R212	1-249-437-11	CARBON	47K	5%	1/4W	
R213	1-249-437-11	CARBON	47K	5%	1/4W	
R214	1-249-437-11	CARBON	47K	5%	1/4W	
R215	1-249-433-11	CARBON	22K	5%	1/4W	
R216	1-249-433-11	CARBON	22K	5%	1/4W	
R217	1-249-433-11	CARBON	22K	5%	1/4W	
R251	1-249-437-11	CARBON	47K	5%	1/4W	
R252	1-249-437-11	CARBON	47K	5%	1/4W	
R253	1-249-437-11	CARBON	47K	5%	1/4W	
R254	1-249-417-11	CARBON	1K	5%	1/4W	F
R255	1-249-417-11	CARBON	1K	5%	1/4W	F
R258	1-249-426-11	CARBON	5.6K	5%	1/4W	
R259	1-249-426-11	CARBON	5.6K	5%	1/4W	
R301	1-249-433-11	CARBON	22K	5%	1/4W	
R302	1-249-433-11	CARBON	22K	5%	1/4W	
R303	1-249-437-11	CARBON	47K	5%	1/4W	
R304	1-249-417-11	CARBON	1K	5%	1/4W	F
R305	1-247-899-11	CARBON	680K	5%	1/4W	
R306	1-249-417-11	CARBON	1K	5%	1/4W	F
R307	1-249-441-11	CARBON	100K	5%	1/4W	
R308	1-249-429-11	CARBON	10K	5%	1/4W	
R309	1-247-807-31	CARBON	100	5%	1/4W	
R310	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R311	1-249-429-11	CARBON	10K	5%	1/4W	
R312	1-249-426-11	CARBON	5.6K	5%	1/4W	
R313	1-249-429-11	CARBON	10K	5%	1/4W	
R314	1-249-437-11	CARBON	47K	5%	1/4W	
R315	1-249-441-11	CARBON	100K	5%	1/4W	
R316	1-249-417-11	CARBON	1K	5%	1/4W	F
R317	1-249-429-11	CARBON	10K	5%	1/4W	
R318	1-249-441-11	CARBON	100K	5%	1/4W	
R319	1-249-417-11	CARBON	1K	5%	1/4W	F
R320	1-249-429-11	CARBON	10K	5%	1/4W	
R321	1-247-807-31	CARBON	100	5%	1/4W	
R322	1-249-425-11	CARBON	4.7K	5%	1/4W	F

Consisting the following section in the power.
(CONNECT/PO-CN/PO-L/PO-R/PO-RE/PO-WO)

MAIN POWER

Ref.No.	Part No.	Description				Remark
R323	1-249-417-11	CARBON	1K	5%	1/4W	F
R324	1-249-429-11	CARBON	10K	5%	1/4W	
R325	1-247-807-31	CARBON	100	5%	1/4W	
R326	1-249-428-11	CARBON	8.2K	5%	1/4W	F
R351	1-249-433-11	CARBON	22K	5%	1/4W	
R352	1-249-433-11	CARBON	22K	5%	1/4W	
R353	1-249-437-11	CARBON	47K	5%	1/4W	
R354	1-249-417-11	CARBON	1K	5%	1/4W	F
R355	1-247-899-11	CARBON	680K	5%	1/4W	
R356	1-249-417-11	CARBON	1K	5%	1/4W	F
R357	1-249-441-11	CARBON	100K	5%	1/4W	
R358	1-249-429-11	CARBON	10K	5%	1/4W	
R359	1-247-807-31	CARBON	100	5%	1/4W	
R401	1-249-441-11	CARBON	100K	5%	1/4W	
R402	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R403	1-249-435-11	CARBON	33K	5%	1/4W	
R404	1-249-411-11	CARBON	330	5%	1/4W	
R405	1-249-441-11	CARBON	100K	5%	1/4W	
R406	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R407	1-249-435-11	CARBON	33K	5%	1/4W	
R408	1-249-411-11	CARBON	330	5%	1/4W	
R409	1-249-441-11	CARBON	100K	5%	1/4W	
R410	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R411	1-249-435-11	CARBON	33K	5%	1/4W	
R412	1-249-411-11	CARBON	330	5%	1/4W	
R413	1-249-431-11	CARBON	15K	5%	1/4W	
R414	1-249-429-11	CARBON	10K	5%	1/4W	
R415	1-249-429-11	CARBON	10K	5%	1/4W	
R416	1-249-441-11	CARBON	100K	5%	1/4W	
R418	1-247-838-00	CARBON	2K	5%	1/4W	
R419	1-249-413-11	CARBON	470	5%	1/4W	F
R420	1-247-840-00	CARBON	2.4K	5%	1/4W	
R421	1-249-417-11	CARBON	1K	5%	1/4W	F
R422	1-249-422-11	CARBON	2.7K	5%	1/4W	F
R423	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R424	1-249-424-11	CARBON	3.9K	5%	1/4W	F
R425	1-249-431-11	CARBON	15K	5%	1/4W	
R426	1-249-424-11	CARBON	3.9K	5%	1/4W	F
R427	1-249-435-11	CARBON	33K	5%	1/4W	
R428	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R429	1-247-887-00	CARBON	220K	5%	1/4W	
R431	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R432	1-247-895-00	CARBON	470K	5%	1/4W	
R433	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R434	1-249-441-11	CARBON	100K	5%	1/4W	
R435	1-249-429-11	CARBON	10K	5%	1/4W	
R436	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R437	1-249-429-11	CARBON	10K	5%	1/4W	
R438	1-249-430-11	CARBON	12K	5%	1/4W	
R439	1-249-434-11	CARBON	27K	5%	1/4W	
R440	1-249-441-11	CARBON	100K	5%	1/4W	
R441	1-249-417-11	CARBON	1K	5%	1/4W	F
R442	1-249-429-11	CARBON	10K	5%	1/4W	
R443	1-247-807-31	CARBON	100	5%	1/4W	
		< TERMINAL >				
TM601	1-537-238-11	TERMINAL BOARD (REAR SPEAKER)				
		< VIBRATOR >				
X101	1-579-125-11	VIBRATOR, CERAMIC (8MHz)				
**********						
*	A-4378-002-A	POWER BOARD, COMPLETE ********** (Including CONNECT, PO-CN, PO-L, PO-R, PO-RE, PO-WO BOARD)				
		< CAPACITOR >				
C601	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C602	1-162-282-31	CERAMIC	100PF	10%	50V	
C603	1-124-477-11	ELECT	47uF	20%	25V	
C604	1-162-191-31	CERAMIC	2.2PF	10%	50V	
C605	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C606	1-162-282-31	CERAMIC	100PF	10%	50V	
C607	1-124-477-11	ELECT	47uF	20%	25V	
C608	1-162-191-31	CERAMIC	2.2PF	10%	50V	
C609	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C610	1-162-282-31	CERAMIC	100PF	10%	50V	
C611	1-124-477-11	ELECT	47uF	20%	25V	
C612	1-162-191-31	CERAMIC	2.2PF	10%	50V	
C613	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C614	1-162-282-31	CERAMIC	100PF	10%	50V	
C615	1-124-477-11	ELECT	47uF	20%	25V	
C616	1-162-191-31	CERAMIC	2.2PF	10%	50V	
C617	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C618	1-162-282-31	CERAMIC	100PF	10%	50V	
C619	1-124-477-11	ELECT	47uF	20%	25V	
C620	1-162-191-31	CERAMIC	2.2PF	10%	50V	
C621	1-124-907-11	ELECT	10uF	20%	50V	
C622	1-124-907-11	ELECT	10uF	20%	50V	
C623	1-124-907-11	ELECT	10uF	20%	50V	
C624	1-124-907-11	ELECT	10uF	20%	50V	
C625	1-130-487-00	MYLAR	0.022uF	5%	50V	
C626	1-130-487-00	MYLAR	0.022uF	5%	50V	
C627	1-130-487-00	MYLAR	0.022uF	5%	50V	
C628	1-130-487-00	MYLAR	0.022uF	5%	50V	
C629	1-130-487-00	MYLAR	0.022uF	5%	50V	
		< CONNECTOR >				
* CN153	1-564-522-11	PLUG, CONNECTOR 7P				

POWER PS

Ref.No.	Part No.	Description				Remark
CN605	1-564-523-11	PLUG, CONNECTOR 8P				
		< IC >				
IC601	8-759-502-31	IC SI-18751				
IC602	8-759-502-31	IC SI-18751				
IC603	8-759-502-31	IC SI-18751				
IC604	8-759-502-31	IC SI-18751				
IC605	8-759-502-31	IC SI-18751				
		< RESISTOR >				
R601	1-249-431-11	CARBON	15K	5%	1/4W	
R602	1-249-413-11	CARBON	470	5%	1/4W	F
R603	1-249-431-11	CARBON	15K	5%	1/4W	
R604	1-249-431-11	CARBON	15K	5%	1/4W	
R605	1-249-413-11	CARBON	470	5%	1/4W	F
R606	1-249-431-11	CARBON	15K	5%	1/4W	
R607	1-249-431-11	CARBON	15K	5%	1/4W	
R608	1-249-408-11	CARBON	180	5%	1/4W	F
R609	1-249-431-11	CARBON	15K	5%	1/4W	
R610	1-249-431-11	CARBON	15K	5%	1/4W	
R611	1-249-410-11	CARBON	270	5%	1/4W	F
R612	1-249-431-11	CARBON	15K	5%	1/4W	
R613	1-249-431-11	CARBON	15K	5%	1/4W	
R614	1-249-406-11	CARBON	120	5%	1/4W	F
R615	1-249-431-11	CARBON	15K	5%	1/4W	
R616	1-249-385-11	CARBON	2.2	5%	1/6W	F
R617	1-249-385-11	CARBON	2.2	5%	1/6W	F
R618	1-249-385-11	CARBON	2.2	5%	1/6W	F
R619	1-249-385-11	CARBON	2.2	5%	1/6W	F
R620	1-249-385-11	CARBON	2.2	5%	1/6W	F
**********						
*	A-4377-999-A	PS BOARD, COMPLETE (US, CND)				
		**********				
*	A-4378-713-A	PS BOARD, COMPLETE (AEP, UK, G)				
		**********				
	1-533-293-11	FUSE HOLDER				
	1-537-770-21	TERMINAL BOARD, GROUND				
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S				
		< CAPACITOR >				
C701	1-124-443-00	ELECT	100uF	20%	10V	
C702	1-124-963-11	ELECT	4.7uF	20%	50V	(US, CND)
C702	1-124-907-11	ELECT	10uF	20%	50V	(AEP, UK, G)
C703	1-124-477-11	ELECT	47uF	20%	25V	
C901	1-164-159-21	CERAMIC	0.1uF		50V	
C902	1-164-159-21	CERAMIC	0.1uF		50V	
C903	1-126-256-11	ELECT	4700uF	20%	35V	

Ref.No.	Part No.	Description				Remark
C904	1-126-256-11	ELECT	4700uF	20%	35V	
C905	1-164-159-21	CERAMIC	0.1uF		50V	
C906	1-164-159-21	CERAMIC	0.1uF		50V	
C907	1-124-557-11	ELECT	1000uF	20%	25V	
C908	1-124-480-11	ELECT	470uF	20%	25V	(US, CND)
C908	1-124-557-11	ELECT	1000uF	20%	25V	(AEP, UK, G)
C909	1-124-477-11	ELECT	47uF	20%	25V	
C910	1-124-477-11	ELECT	47uF	20%	25V	
C911	1-124-907-11	ELECT	10uF	20%	50V	
C912	1-124-477-11	ELECT	47uF	20%	25V	
C913	1-124-472-11	ELECT	470uF	20%	10V	
C914	1-124-477-11	ELECT	47uF	20%	25V	
C917	1-124-910-11	ELECT	47uF	20%	50V	
C918	1-124-907-11	ELECT	10uF	20%	50V	
C919	1-124-477-11	ELECT	47uF	20%	25V	
C920	1-124-122-11	ELECT	100uF	20%	50V	
		< CONNECTOR >				
* CN154	1-770-747-11	CONNECTOR, BOARD TO BOARD 12P				
* CN601	1-565-291-11	SOCKET, CONNECTOR 13P				(R-ch SPEAKER OUTPUT)
* CN602	1-506-946-11	PIN, CONNECTOR 4P				
* CN603	1-506-944-11	PIN, CONNECTOR 2P				
		< DIODE >				
D701	8-719-987-63	DIODE 1N4148M				
D702	8-719-987-63	DIODE 1N4148M				
D901	8-719-500-60	DIODE D5SBA20				
D902	8-719-200-82	DIODE 11ES2				
D903	8-719-200-82	DIODE 11ES2				
D904	8-719-200-82	DIODE 11ES2				
D905	8-719-200-82	DIODE 11ES2				
D906	8-719-933-41	DIODE HZS6C3L				
D907	8-719-933-36	DIODE HZS6B1L				
D908	8-719-200-82	DIODE 11ES2				
D909	8-719-200-82	DIODE 11ES2				
D910	8-719-987-63	DIODE 1N4148M				
D911	8-719-002-19	DIODE UZL-20M				
D912	8-719-014-66	DIODE UZP-5.6B				
D913	8-719-200-82	DIODE 11ES2				
		< IC >				
IC701	8-759-111-68	IC uPC1237HA				
IC901	8-759-701-59	IC NJM78M09FA				
IC902	8-759-604-43	IC M5F79M09L				
		< TRANSISTOR >				
Q901	8-729-030-18	TRANSISTOR 2SD2525				
Q902	8-729-030-19	TRANSISTOR 2SB1640				

Ref. No.	Part No.	Description				Remark
Q903	8-729-119-76	TRANSISTOR 2SA1175-HFE				
		< RESISTOR >				
R701	1-249-431-11	CARBON	15K	5%	1/4W	
R702	1-249-433-11	CARBON	22K	5%	1/4W	
R703	1-249-435-11	CARBON	33K	5%	1/4W	
R704	1-249-437-11	CARBON	47K	5%	1/4W	
R705	1-249-439-11	CARBON	68K	5%	1/4W	
⚠R706	1-249-411-11	CARBON	330	5%	1/4W	
⚠R707	1-249-411-11	CARBON	330	5%	1/4W	
⚠R708	1-249-411-11	CARBON	330	5%	1/4W	
R711	1-249-441-11	CARBON	100K	5%	1/4W	
R712	1-249-435-11	CARBON	33K	5%	1/4W	
R713	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R904	1-249-413-11	CARBON	470	5%	1/4W	F
R905	1-249-413-11	CARBON	470	5%	1/4W	F
R906	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R907	1-249-437-11	CARBON	47K	5%	1/4W	
R908	1-247-807-31	CARBON	100	5%	1/4W	
R909	1-247-807-31	CARBON	100	5%	1/4W	
R910	1-249-431-11	CARBON	15K	5%	1/4W	
⚠R911	1-249-393-11	CARBON	10	5%	1/4W	F
⚠R912	1-249-402-11	CARBON	56	5%	1/4W	F
R913	1-249-429-11	CARBON	10K	5%	1/4W	
		< RELAY >				
RY701	1-515-920-11	RELAY (24V)				
RY702	1-515-920-11	RELAY (24V)				
RY703	1-515-920-11	RELAY (24V)				
⚠RY901	1-515-840-11	RELAY				
**********						
*	1-656-787-11	RSP BOARD				
		*********				
		< CONNECTOR >				
* CN651	1-565-291-11	SOCKET, CONNECTOR 13P				
						(R-CH SPEAKER INPUT)
* CN652	1-506-946-11	PIN, CONNECTOR 4P				
* CN653	1-506-944-11	PIN, CONNECTOR 2P				
**********						
*	1-656-794-11	T1 BOARD				
		********				
		< CONNECTOR >				
CN901	1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P				

Ref. No.	Part No.	Description				Remark
		< FUSE >				
⚠F901	1-532-215-00	FUSE T800mA (AEP, UK, G)				
⚠F901	1-576-104-21	FUSE 2A 250V (US, CND)				
**********						
*	1-656-795-11	T2 BOARD (US, AEP, UK, G)				
		**********				
		< CONNECTOR >				
CN904	1-691-771-11	PLUG (MICRO CONNECTOR) 9P				
		< RESISTOR >				
⚠R901	1-249-389-11	CARBON	4.7	5%	1/4W	F
⚠R902	1-249-381-11	CARBON	1	5%	1/4W	F
⚠R903	1-249-381-11	CARBON	1	5%	1/4W	F
**********						
*	1-657-171-11	T3 BOARD (CND)				
		**********				
		< CONNECTOR >				
CN904	1-691-771-11	PLUG (MICRO CONNECTOR) 9P				
		< FUSE >				
⚠F902	1-532-778-21	FUSE, MICRO (1.6A 125V)				
⚠F903	1-532-781-11	FUSE, MICRO (3.15A 125V)				
⚠F904	1-532-781-11	FUSE, MICRO (3.15A 125V)				
**********						
		MISCELLANEOUS				
		**********				
55	1-765-348-11	WIRE (FLAT TYPE) (27 CORE)				
104	1-533-293-11	FUSE HOLDER				
⚠109	1-575-042-21	CORD, POWER (US, CND)				
⚠109	1-575-651-21	CORD, POWER (AEP, G)				
⚠109	1-751-529-11	CORD, POWER (UK)				
110	1-537-770-21	TERMINAL BOARD, GROUND				
⚠F901	1-532-215-00	FUSE (T800mA) (AEP, UK, G)				
⚠F901	1-576-104-21	FUSE (2A 250V) (US, CND)				
FL501	1-517-424-11	INDICATOR TUBE, FLUORESCENT				
IC601	8-759-502-31	IC SI-18751				
IC602	8-759-502-31	IC SI-18751				
IC603	8-759-502-31	IC SI-18751				
IC604	8-759-502-31	IC SI-18751				
IC605	8-759-502-31	IC SI-18751				
SP601	1-504-874-11	SPEAKER (5CM) (FRONT)				
SP602	1-504-875-11	SPEAKER (10CM) (CENTER)				
SP603	1-504-876-11	SPEAKER (13CM) (WOOFER)				

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
SP604	1-504-874-11	SPEAKER (5CM) (FRONT)	
SP605	1-504-875-11	SPEAKER (10CM) (CENTER)	
SP606	1-504-876-11	SPEAKER (13CM) (WOOFER)	
SP607	1-504-877-11	SPEAKER (8CM) (SURROUND)	
SP608	1-504-877-11	SPEAKER (8CM) (SURROUND)	
⚠T901	1-427-956-11	TRANSFORMER, POWER (US, CND)	
⚠T901	1-427-957-11	TRANSFORMER, POWER (AEP, G, UK)	

****

ACCESSORIES & PACKING MATERIALS
****

	1-473-192-11	REMOTE COMMANDER (RM-J15)	
	1-751-347-11	CORD, CONNECTION (SPEAKER 10m (for SS-SR151))	
	1-775-390-11	CORD, CONNECTION (AUDIO 100cm)	
	1-769-816-11	CORD (WITH CONNECTOR) 13P	
	3-800-386-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE, GERMAN, DUTCH, SWEDISH, ITALIAN) (AEP, UK, G, SP, MY, CH, AUS)	
	3-800-386-21	MANUAL, INSTRUCTION (ENGLISH) (US, CND)	
	3-800-386-31	MANUAL INSTRUCTION (FRENCH) (CND)	
	4-384-285-01	COVER, BATTERY (for RM-J15)	
	4-973-509-01	BASE	
*	4-975-895-01	INDIVIDUAL CARTON (US, CND, SP, MY, CH, AUS)	
*	4-975-896-01	CUSHION (TOP)	
*	4-975-897-01	CUSHION (BOTTOM)	
	4-976-546-01	BASE SCREW (4X18)	
*	4-977-432-01	INDIVIDUAL CARTON (AEP, G, UK)	

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****
HARDWARE LIST
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#1	7-685-162-01	SCREW (4X14), (+) (B) TAPPING
#2	7-685-659-79	SCREW +BVTP 4X8 TYPE2 IT-3
#3	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S
#4	7-685-134-19	SCREW +PTPWH 2.6X8 (TYPE2)
#5	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S
#6	7-685-886-01	SCREW +BVTT 4X20 (S)

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English
95F0991-1
Printed in Japan
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Published by Home A&V Products Div.
Quality Engineering Dept.

Sony Corporation
Consumer A&V Products Company
Home A&V Products Div.

9-960-262-11